

When the casing B'' is closed, the inserts of the two adapters, the platen 150 and the cover 170 are fixed together by screws passing through orifices of the platen 150 and make it possible as will be seen to 5 construct a completely leaktight assembly.

The casing B'' of the acquisition system according to the invention does therefore not comprise on its main body (materialized by the two adapters and the cover) 10 any connector for coupling with other casings, the hermaphrodite connectors for such coupling possibly being shifted to the extremity of the cable sections C''(i) and C''(i+1).

15 An advantageous consequence thereof is that this casing B'' may be of especially reduced dimensions - of the order of 200 cm³, while the casings of present-day systems have a volume which commonly reaches several liters.

20 Moreover, the take-up of load by the lugs 143 makes it possible to dispense with the additional devices for taking up loads alluded to hereinabove, which were not integrated into existing casings.

25 Specifically, in the system according to the invention the tensile loads between the cables interlinking the casings or linking them to a central processing unit are taken up by the succession of the following 30 elements:

- sheath of the cable (and possibly additional armor of the cable made of Kevlar (registered trademark) in the case of a reinforced link) which is linked to a first side of the casing,
- link between the end of the cable and a first insert of the adapter. This link is as has been seen effected by engaging the sheath of the cable between baffles of the insert, but may also as will be seen

more particularly with reference to Figure 5b, employ the clamping of the end of a Kevlar (registered trademark) armor in the case of a reinforced link,

- lugs projecting from the first insert and from the 5 first associated adapter,
- platen in which the projecting lugs are engaged (and possibly second platen as described later with reference to Figure 5b),
- lugs of the second adapter of the casing,
- 10 • insert of the second adapter,
- sheath of the second cable section linked to a second side of the casing.

By dispensing with the conventional load take-up 15 devices it is thus also possible to eliminate the drawbacks cited above and related to the conventional load take-up devices.

Figure 5a is a longitudinal sectional view 20 diagrammatically representing a second embodiment of a casing B'' according to the invention, and intended to be employed on land, said casing now being assembled. The two variant embodiments already represented in Figure 4 are found again in the right and left parts of 25 this figure respectively.

Found again in this figure are the two cable sections C''(i) and C''(i+1) which are aligned on either side of the casing. The end adapter 140a of the section C''(i) 30 is in contact with the end adapter 140b of the section C''(i+1). The platen 150 is fixed (by conventional means not represented such as screws, which also hold the cover 170 on the plane upper faces of the two adjacent adapters, and on its upper face carries the 35 platen 160 which comprises means for processing the signals, said signals being conveyed by:

- the electrical conductors 141a which pass through the conduit 142a of the adapter 140a so as to be in

electrical contact with the processing means contained inside this adapter (variant in the left part of the figure),

- the pins 141b engaged in the duct 1420b (which 5 extends inside the adapter 140b up to the processing means through another conduit), and connected with the processing means contained inside the adapter 140b (variant in the right part of the figure).

10 In both instances, the conductors 141a and the pins 141b each pass through a respective conduit of the platen 150.

15 Figure 5b illustrates a different configuration of the lugs 143a and 143b of the respective adapters 140a and 140b. Here, as in Figure 4, the lugs are partially embedded in the insert 145a, 145b of their associated adapter, but project perpendicularly from the two faces (upper and lower) of said adapter.

20 Their projecting upper part is engaged just like that of the lugs 143 of Figure 4 in an orifice of the platen 150, their projecting lower part being moreover engaged in an orifice of an additional platen 180 sitting on 25 and screwed to the plane lower face of the two adapters 140a and 140b which are then "sandwiched" between the two platens 150 and 180.

30 This variant embodiment - second load take-up platen 180 and lugs likewise projecting downwards so as to anchor the adapters to this second platen - is advantageous in the instance where the two sections of cable of the casing may be subjected to a sizeable tension (of the order of 2 500 Newtons). It thus 35 constitutes a preferred variant embodiment when employing the casing at sea or in wet surroundings of the "shallow water" type.